Running Head: INTERGROUP CONTACT AND MUSIC

More than music!

A longitudinal test of German–Polish music encounters

Abstract

This research examines music encounters as a hitherto unexplored type of intergroup contact intervention. We tested the short- and mid-term effects of German–Polish music encounters that either took place in Germany or in Poland, respectively, on German's attitudes towards Poles. Ninety-nine German participants completed a questionnaire one week before the encounter (t_0), directly thereafter (t_1), and four weeks later (t_2). The control group (N=67) did not take part in any music encounter and completed the measures twice (t_0 and t_2). Results revealed that attitudes toward the Polish out-group improved sustainably, but only when the encounter took place in Poland. In contrast, for encounters realized in Germany, no attitude change occurred. Implications of these findings are discussed.

Key words: Intergroup contact, mediation, emotions, intergroup attitudes, longitudinal study

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This summer I created an orchestra in which young Jewish and Palestinian musicians play together as though they had been doing so forever. Through music we drove away hostility.
Daniel Barenboim, October 1999

1. Introduction

The above quote by Daniel Barenboim, founder of the Jewish–Palestinian West Eastern Divan Orchestra, nicely illustrates that intergroup contact in the context of music making can be a powerful means for overcoming prejudice—even when intergroup relations are characterized by severe conflict. In recent years, the role of intergroup contact in the context of music and arts for improving intergroup relations and resolving conflicts has received growing attention from musicians, practitioners and scholars (Bergh & Sloboda, 2010). Accordingly, many intergroup music projects in which members of different ethnic, religious and social groups make music together have been described as successful in creating harmonious intergroup relations and friendships (e.g., Bosnian refugees and Norwegians in the AZRA project, see Pettan, 2010; an interreligious choir in Sarajevo, Bosnia-Herzegovina, see Robertson, 2010; an Israeli–Palestinian children's choir, see Skyllstad, 2000). Skyllstad (2000), for instance, puts it as follows: "Musical interaction creates social values. Two or more people create something that is greater than the sum of what they create each on their own. And sympathies are formed […] Through musical dialogues the interrelationship with the group is explored" (Skyllstad, 2000, p. 2). In these projects, musicians from different groups *cooperatively* make music together on an *equal status* basis, preparing for joint concerts that represent the group members' *common goals*. Additionally, the projects often receive *institutional* (e.g., financial) *support*. Thus, intergroup music making seems to constitute an optimal contact situation in terms of Allport's (1954) contact criteria. So far,

however, there is not a single empirical study supporting the anecdotal evidence in the form of positive experiences reported by participants, initiators and organizers of these music projects.

With the present research we aim to address this empirical gap. More specifically, we investigate the short- and mid-term effects of German–Polish music encounters on Germans' attitudes toward Poles.

2. The Effect of Intergroup Contact

The contact hypothesis (Allport, 1954) stimulated an extensive range of research and received strong empirical support (Pettigrew & Tropp, 2006). The majority of contact studies are cross-sectional using retrospective reports of personal contact experiences with out-group members (Pettigrew & Tropp, 2006). From these studies, however, it is difficult to firmly establish the direction of causality between contact and prejudice reduction (Pettigrew, 1998). Further support for the contact hypothesis comes from a number of experimental studies that clearly demonstrate that positive intergroup encounters can have beneficial impact on several forms of intergroup bias (e.g., Desforges et al., 1991; Paolini, Hewstone, Rubin, & Pay, 2004). However, most of these studies are laboratory experiments that often lack external validity (see Paluck & Green, 2009) and rarely test long-term effects of contact manipulations (see for exceptions Bilewicz, 2007; Green & Wong, 2009, Krahé & Altwasser, 2006). Accordingly, field experiments and quasi-experiments (e.g., Maras & Brown, 1996; White & Abu-Rayya, 2012) that longitudinally investigated 'real-world' contact interventions are rare.

Moreover, there is a growing number of longitudinal field studies that investigate 'real-world' contact (e.g., Binder et al., 2009; Brown, Eller, Leeds, & Stace, 2007; Dhont, van Hiel, de Bolle, & Roets, 2012; Eller & Abrams, 2003, 2004; Maras & Brown, 1996). Overall, the existing evidence from these studies indicates that out-group contact leads to reduced prejudice levels, but likewise that more prejudiced people tend to avoid contact with out-groups. Furthermore, these longitudinal studies examine effects of ongoing intergroup contact

on prejudice rather than longer-term changes in prejudice after the contact has ended. Thus, it remains mostly unexplored whether specific intergroup encounters that are limited in time can have longer-term impact on prejudice reduction. This question becomes particularly important in intergroup settings that are characterized by highly limited contact opportunities (e.g., due to territorial segregation; see Wagner, van Dick, Pettigrew, & Christ, 2003), and where contact interventions are needed that improve out-group attitudes on a sustainable basis even though the contact is confined to a certain period of time. Hence, testing the effectiveness of specific intergroup encounters in reducing prejudice is crucial for the development and implementation of intergroup contact interventions.

Consequently, the present research investigates the short- and mid-term effects of intergroup music encounters—contact situations that incorporate Allport's conditions but are clearly limited in time—on intergroup attitudes. In line with Allport's (1954) contact hypothesis and results of previous research, we assume that positive contact in intergroup music encounters will lead to both short- and mid-term improvements of intergroup attitudes.

3. Context of the Present Study

The present study is conducted within the German–Polish context. German–Polish relations are characterized by a long history of territorial assaults, war, and power imbalance between the two nations with Germany having more power than Poland (see for an overview Chapman, Clegg, & Gajewska-De Mattos, 2004). Moreover, Poles are frequent targets of Germans' prejudice and vice versa. Germans associate Poles with negative stereotypes and behaviors, such as having a low social status ('the Polish charwoman', Sakson, 2012) or stealing cars. Furthermore, van Dick et al. (2004, Study 2) showed that Germans on average evaluate Poles at least as negatively as other minority groups in German society, such as Turks (the largest minority in Germany) or Vietnamese (a considerably large majority in former East Germany). However, Poles likewise have negative views about Germans - reflective of a long history of German territorial invasions - often conceptualizing them as

‘enemies’, ‘invaders’, or as demonstrating their superiority (Chapman et al., 2004). Changing these mutually negative attitudes is one essential component to foster reconciliation between Germany and Poland and to facilitate cultural, economic and political cross-border cooperation and intercultural understanding. This is particularly important, as Poles represent an important minority in Germany: Approximately two million people with a polish background live in Germany (Kaluza, 2002), and the number of Polish citizens living in Germany is growing constantly (German Federal Statistical Office, 2012).

4. Method

4.1 Design and Procedure

To test our hypotheses, we investigated German–Polish music encounters with a quasi-experimental longitudinal design. Between October 2007 and October 2008, ten music encounters, jointly organized by German and Polish music schools, were investigated. The German music schools were from different regions of Germany. Participants did not register individually for taking part in the encounter, but attended as part of existing music ensembles (e.g., orchestras, choirs). The duration of the encounters varied between two and six days. Four projects were realized in Germany, six in Poland. In each project the German and Polish musicians formed a German–Polish music ensemble and cooperatively prepared for at least one joint concert given at the end of the encounter. In all cases, a German and a Polish music-school teacher jointly led the newly formed ensembles. Thus, we can assume that Allport’s criteria of optimal intergroup contact were met. Additionally, although making music was the main focus of the encounters, joint sightseeing activities and meals complemented the program. Furthermore, accommodation was organized so that German participants and their families hosted Polish participants when the encounters took place in Germany, and vice versa for encounters in Poland. Accordingly, there were several additional opportunities for contact with the Polish musicians. Mostly, participants communicated in English or used alternative ways to communicate (e.g., gestures).

German participants[1] of the encounters completed surveys one week before the music encounter (t_0), directly thereafter (t_1), and again four weeks later (t_2). Notably, at t_0, participants were already preparing for the upcoming encounter. The first and third surveys (t_0 and t_2) were conducted during rehearsals at the premises of the respective music school. The second survey (t_1) was—depending on whether the encounter took place in Germany or Poland—administered either after the departure of the Polish guests at the premises of the respective music school, or on the return trip from Poland to Germany.

Participants of the control group, who were recruited from music schools that did not organize German–Polish encounters, completed surveys twice at a five-week interval (t_0 and t_2). The measures used were identical to those administered to the intervention group at t_0 and t_2. At t_1 the control group did not fill in a questionnaire because the measures of t_1 (contact quality, contact quantity) directly addressed the music encounters, and thus, did not apply to the control group. All participants took part voluntarily, were assured of confidentiality and debriefed after the completion of the study.

4.2 Participants

The initial sample in the intervention group at t_0 comprised 180 German music school students and teachers (72 females, 108 males)[2] with a mean age of 22.76 (*SD* = 13.65). Of these participants, 140 (78 %, 86 female, 54 male) filled out the questionnaires directly after the music encounter at t_1. They were between 12 and 75 years old (*M* = 23.06, *SD* = 13.81). Altogether, 99 participants (55 %, 58 female, 41 male) with a mean age of 24.33 (*SD* = 14.41) completed the questionnaires at all three times of measurement.

In the control group, 125 participants (72 females, 53 males) with a mean age of 24.53 (*SD* = 17.07) completed the measures at t_0. Of these, 67 (54 %, 39 females, 28 males) could be matched across both times of measurement (t_0 and t_2). Their age ranged between 12 and 76 years (*M* = 25.04, *SD* = 18.15).

The comparison of dropout rates from t_0 to t_2 betweenthe intervention group (45 %) and the control group (46%) revealed no significant difference, $\chi^2(1) = .06$, $p = .81$.

4.3 Measures

For all measures 10-point scales were used. Items were reverse-scored where necessary, so that higher values generally indicate more positive outcomes on the assessed dimension. All scales[3] were reliable with Cronbach's αs ranging from .78 to .92 (see Table 1).

4.3.1 Contact quality

To assess contact quality, we used eight items adapted from Gaertner and colleagues (1989; see also Islam & Hewstone, 1993). At t_0 participants of the intervention group and the control group were asked to rate the quality of their *overall* contact experiences with Poles on a scale with endpoints ranging, e.g., from 1 = *very cooperative* to 10 = *not at all cooperative* (further items were positive, pleasant, tense, trustful, amicably, frustrating and superficial). In contrast, at t_1 we asked participants of the intervention group to rate their contact experiences with Poles *during the music encounter* using the same items. Two further items were added: Participants indicated how problematic they perceived the communication with the Polish musicians to be, and whether there were many versus very few opportunities to get to know each other.

4.3.2 Contact quantity

At t_0 contact quantity *in general* was assessed with four items. Participants were asked to indicate how often they had previously met Poles, talked to Poles, spent time with Poles, and how often they had visited Poles or had been visited by Poles. The response scale ranged from 1 = *never* to 10 = *very often*.

To assess contact quantity during the music encounter, participants indicated how many days they participated in the music encounter. Additionally, they rated how much time they had spent with Poles during the encounter. The scale endpoints were 1 = *hardly ever* and

10 = *almost always*. The two items were uncorrelated, $r = .01$, $p = .92$, and were not combined.

4.3.3 Attitudes

Attitudes toward Poles were measured with four items. First, participants were asked to indicate their overall attitude by evaluating Poles on a scale ranging from –5 = *very negative* to +5 = *very positive.* Additionally, participants had to rate three social distance items (Bogardus, 1933; Verkuyten, 1997). Participants indicated how pleasant versus unpleasant they would perceive the following forms of possible interactions with Poles: Having many Poles in the neighborhood, having many Polish friends, and working closely together with Poles. The endpoints of the response scale were –5 = *very unpleasant* and +5 = *very pleasant*, respectively. The four items were summed and averaged to form a reliable attitude index. The attitude measure was identical for both groups of the study and for all times of measurement.

5. Results

Means, standard deviations and scale reliabilities are presented in Table 1.

-- Insert Table 1 here --

In our sample, participants who took part in the same music encounter may share similar experiences. This could have created clustering of variance. In order to take into account this non-independence of observations of participants from the same music encounter (intervention group) or music ensemble (control group), we conducted the following analyses with the software Mplus 6.1 (Muthén & Muthén, 1998-2007), using the TYPE = COMPLEX analysis mode, which corrects the standard errors for biases due to clustering.

5.1 Preliminary Analyses

Attrition is a common threat to validity in longitudinal designs (Shadish, Cook, & Campbell, 2002). Therefore, we predicted, in two separate analyses, dropout at t_1 and dropout at t_2 based on the following variables measured at t_0: Age, gender, attitudes, contact quality,

contact quantity. Logistic regression was used for the dichotomous dependent variable dropout (yes/no). We fixed the coefficients of all predictor variables at the value of zero and used model fit statistics to check whether these constraints were tenable. Indeed, the constrained models yielded a non-significant $\chi^2(5) = 2.98$, $p = .70$, for dropout at t_1 as well as for dropout at t_2, $\chi^2(5) = 5.85$, $p = .32$. Finally, a model for dropout at t_2, which additionally included all interactions of the baseline measures with the dummy variable for intervention versus control group (0 = control group, 1 = intervention group) was non-significant as well, $\chi^2(11) = 12.92$, $p = .30$. These results reassure us that attrition was not systematically related to the baseline measures.

Furthermore, due to the nature of this field study, it was not possible to randomly assign the participants to either the intervention or the comparison group. Thus, it was necessary to test whether attitudes, contact quantity, and contact quality differed between both groups at t_0. Accordingly, we regressed these variables on a dummy variable (0 = control group, 1 = intervention group). The intervention group had marginally more positive attitudes toward Poles ($M = 2.02$, $SD = 1.58$) than the control group ($M = 1.27$, $SD = 1.54$, $z = 1.86$, $p = .06$), and participants in this condition reported significantly more frequent contact ($M = 5.36$, $SD = 2.45$ vs. $M = 4.18$, $SD = 2.26$, $z = 3.51$, $p < .001$) as well as significantly higher contact quality ($M = 7.26$, $SD = 1.68$ vs. $M = 6.69$, $SD = 1.68$, $z = 2.25$, $p = .03$).

5.2 Main Effect of Intergroup Contact

To test whether participating in the music encounters resulted in improved attitudes towards Poles, we first compared the intervention group's attitudes at t_0, at t_1 and at t_2. Attitudes were significantly more positive at t_1 ($M = 2.42$, $SD = 1.53$) than at t_0 ($M = 2.02$, $SD = 1.58$, $z = 3.08$, $p = .002$). At t_2, attitudes were indistinguishable from attitudes at t_1 ($M = 2.35$, $SD = 1.39$, $z = 1.58$, $p = .12$) and significantly more positive than at t_0 ($z = 2.25$, $p = .02$), indicating that the attitude change was stable.

Given the threats to validity associated with simple pre-post comparisons (e.g., maturation, history, testing etc.), we compared the attitude change from t_0 to t_2 in the intervention group with the change in the control group. Thus, following the guidelines of Judd, Kenny, and McClelland (2001), we regressed the difference scores of t_2 attitudes minus t_0 attitudes on a dummy variable (0 = control group, 1 = intervention group). The intercept of this regression was $b = –.19$ ($SE = .21$, $p = .36$), indicating non-significant attitude change in the control group. The slope of the regression was $b = .48$ ($SE = .24$, $p < .05$), indicating a significantly more positive attitude change in the intervention group. These results suggest that the positive attitude change is unique to the intervention group and cannot easily be explained by maturation or testing effects.

As noted above, however, the intervention group was heterogeneous in that four music encounters took place in Germany and six encounters were realized in Poland. Thus, an important question was whether the attitude change would differ depending on the location of the encounter. To answer this question, we first regressed the difference score of t_1 attitudes and t_0 attitudes on a dummy variable (0 = encounter in Germany, 1 = encounter in Poland). Interestingly, this analysis revealed that no attitude change occurred among German participants from the German encounters, as indicated by a non-significant intercept ($b = .06$, $SE = .15$, $p = .70$). However, the slope of the regression was $b = .55$ ($SE = .19$, $p = .004$), indicating that attitude change was significantly more positive among German participants from Polish workshops. For attitude change from t_1 to t_2, no significant differences were observed between encounters in Poland and encounters in Germany ($b = .01$, $SE = .16$, $p = .96$). In addition, we compared attitudes at t_0 and at t_2, which again were not significantly different for participants from German encounters ($b = –.03$, $SE = .24$, $p = .91$), but significantly more positive at t_2 for participants from encounters in Poland ($b = .46$, $SE = .13$, $p < .01$). Thus, the overall attitude change reported above was driven by participants from the music encounters in Poland.

Further analyses showed that participants in the encounters in Poland versus Germany did not differ regarding their attitudes at t_0 (b = –.23, SE = .36, p = .52) or the quantity and quality of their contact experiences at t_0 (b = –.25, SE = .56, p = .66 and b = .33, SE = .43, p = .45, respectively). Moreover, no difference was found in terms of number of days participants took part in the encounters (b = .48, SE = .56, p = .62) or the amount of time they had spent together with Poles during the encounters (b = .04, SE = .67, p = .95). However, there was a marginally significant tendency of participants in Poland to rate the contact quality of the encounter (t_1) as more positive than participants in Germany (b = .95, SE = .56, p = .09).

We therefore considered contact quality at t_1 as a covariate and tested in the next step whether the differential effectiveness of Polish versus German music encounters could be explained by the marginally more positive contact quality of Polish music encounters. For attitude change from t_0 to t_1, contact quality was indeed a significant predictor (b = .11, SE = .04, p = .01), whilst attitude change remained significantly more positive among participants from encounters in Poland (b = .44, SE = .18, p = .01). For the difference score of t_2 and t_0 attitudes, contact quality at t_1 again turned out to be a significant covariate (b = .12, SE = .04, p = .011). This time, however, the slope of the dummy variable for Polish versus German music encounters was non-significant (b = .34, SE = .24, p = .15), suggesting that the higher contact quality might in part explain the greater attitude change in polish music encounters[4].

--Insert Figure 1 here--

Taken together, and as illustrated in Figure 1, results partially support our hypothesis. Germans' attitudes toward Poles improved significantly after contact, and this effect remained stable over a period of four weeks, whereas attitudes of the control group remained unchanged. However, attitude change among German participants only occurred when the music encounters took place in Poland.

6. Discussion

Aim of the present study was to investigate the short- and mid-term effects of specific time-limited intergroup contact situations in the context of music encounters on intergroup attitudes.

Our findings yield evidence for the effectiveness of music encounters in improving intergroup attitudes—but only for participants who travelled to the out-group's country for the encounter, indicating that other factors than the music contact per se might account for this unexpected finding. First, we can assume that encounters in Poland offered more opportunities for contact with Poles (see Wagner et al., 2003)—above and beyond the music-making context. Even though our findings show that the encounters in Germany and Poland did not generally differ regarding the contact quantity of the music encounters, participants in the encounters in Poland might have had a greater variety of contact experiences during the music encounters. To illustrate, participants were accommodated in host families, and thus, encounters in Poland included also contact with family members of the Polish musicians whereas encounters in Germany were limited to contact with the Polish musicians. Accordingly, participants of encounters in Poland might have formed broader and more differentiated impressions about the Polish out-group than German participants who met their Polish counterparts in Germany. This would in line with ideas of decategorization due to contact being able to reduce prejudice against the specific individuals present in the encounter but less likely to generalize to the outgroup as a whole.

A second explanation of our findings could be a difference in contact quality between encounters that were realized in Poland and encounters held in Germany. Indeed, our results revealed a marginally significant tendency of participants of the encounters in Poland to perceive the contact quality as more positive, whereas no other differences were found between participants of the encounters in Poland and encounters in Germany. Moreover, the differential effectiveness of encounters in Poland versus Germany in changing intergroup attitudes decreased at t_1 and even disappeared at t_2 after controlling for contact quality,

indicating that contact quality in part explains the differential effectiveness of music encounters in Poland versus Germany. Thus, this finding speaks to the importance of assessing subjective perceptions of Allport's contact conditions rather than relying on their objective realization.

Third, varying status relations might account for the differential effectiveness of the music encounters. Research by Henry and Hardin (2006) indicates that status differences between groups moderate the effects of intergroup contact on implicit prejudice. In two studies, they have shown that the lower-status groups' implicit bias towards a higher-status group decreased as a function of positive intergroup contact, whereas for the higher-status groups intergroup contact had no effect on out-group attitudes. In the present study, Germans' and Poles' status may have varied depending on the location of the music encounter. Germans often perceive Poland as having a lower social status and less power within the EU compared to Germany (Sakson, 2012). In encounters that were realized in Germany, this perception of a general status imbalance in favor of the Germans might have been maintained or even strengthened, as the contact might have happened mainly on the terms and conditions of the German hosts. In contrast, for encounters in Poland, this status hierarchy between the Polish hosts and the German guests might have been reversed: The contact potentially happened on the terms and conditions of the Poles while the Germans found themselves in the position of the lower-status group that was supposed to adapt to the rules and cultural specificities of the host group. This might not have changed the perception of a general status or power imbalance, but might have reversed the situation-specific status hierarchy.

A fourth factor which is also related to the participants' varying social roles as hosts or guests, respectively, depending on the location of the encounter, could be the different degrees of experienced hospitability. Different roles (i.e., as host vs. guest) generally imply different behavior styles (e.g., helpful vs. grateful). Participants of the music encounters in Poland experienced Poles in their role as hosts and thus might have perceived them as more

friendly, courteous, helpful, and generally as hospitable compared to participants of the German encounters who themselves served as hosts for their Polish guests. This reasoning is in line with anecdotal evidence: Participants, when coming back from encounters in Poland, frequently reported that they were overwhelmed by the great 'Polish hospitality'. This experienced hospitality thus might have influenced the contact quality and the effectiveness of the music encounters in changing out-group attitudes.

Taken together, although our data do not provide clear empirical evidence in support of one of these explanations, the results clearly indicate that intergroup contact might be differentially effective depending on whether the contact is located in one's own vs. the out-group's country. Because intergroup contact rarely takes place on neutral ground but is, instead, often realized on the higher-status group's territory, future research needs to further explore this finding and investigate the causes of such differential effectiveness.

Finally, some empirical and methodological limitations of the present study are discussed. First, for practical reasons, we could not include the Polish participants in our study. We were thus not able to test whether Poles' attitudes toward Germans too had only changed in the encounters in Poland or in the encounters of the out-group's country, respectively. Second, it was not possible to randomly assign participants to the intervention and control condition, therefore, internal validity of the study is decreased. Indeed, before the encounters took place, the intervention and control group significantly differed in their attitudes and contact experiences with Poles: That is, in the intervention group attitudes toward and contact experiences with Poles were quite positive already before they participated in the music encounter. This supports the argument that due to a self-selection bias only less prejudiced people attended the music encounters. Furthermore, it also raises the question whether the contact effect might be limited to low-prejudiced people only. However, recent research contradicts this notion and suggests that contact may be even more effective for people higher in prejudice (Adesokan, Ullrich, van Dick, & Tropp, 2011; Hodson, 2011),

which means that the selection bias in our study would rather have underestimated the effect of contact. In addition, participants in the intervention group already knew at the first time of measurement that they would participate in the German–Polish music encounter. Expectations about the upcoming contact might thus have positively affected intergroup attitudes and may therefore partially account for the observed differences. Nevertheless, our data partly provide support for our hypothesis and demonstrate positive attitude change at least for participants who had contact with Poles in the out-group's country, compared to unchanged attitudes in the control group.

Despite these limitations, this study is the first that investigated the effectiveness of intergroup contact in the context of music making for improving out-group attitudes. Intergroup music making has previously been described as successful in creating harmonious intergroup relations and friendships (e.g., Pettan, 2010; Robertson, 2010; Skyllstad, 2000); our results generally support this idea and demonstrate that intergroup music making can be an effective vehicle for improving intergroup relations. However, our findings also clearly suggest that music making may not be enough. Only participants who were hosted by the out-group in their country benefited in terms of more positive attitudes. This result points to the fact that more research is needed that examines the relative importance of context factors such as location for the effects of intergroup contact. Moreover, future work needs to investigate how location affects other contact-relevant variables, for instance, situation-specific status and power hierarchies (i.e., between hosts and guests), social roles or the variety of contact opportunities.

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Footnotes

[1] For organizational reasons, only German participants could be included in the study. More specifically, for some of the music encounters it remained unclear until shortly before the encounter took place, which of the Polish musicians would actually take part in the encounters. This made it impossible to administer the questionnaires to the Polish participants one week before the encounters took place (t_0).

[2] Responses from teachers and students were analyzed together for the following reasons: The number of teachers who accompanied the music encounters was very limited (between one or two teachers in each encounter). Thus, due to a lack of statistical power separate analyses for this subsample were not possible. Moreover, due to the limited number of teachers in the study and in order to guarantee anonymity for each participant, teachers were not asked to indicate on the questionnaires their professional role in the music encounters. They are therefore not identifiable in the data set.

[3] Other measures than those reported here were also included in the study. However, these measures are not relevant for the purpose of the present article and are thus not reported here. For details on these measures see Kuchenbrandt (2010).

[4] The results are not strictly in line with a mediation model. The indirect effects of the dummy variable (0 = encounter in Germany, 1 = encounter in Poland) via contact quality on attitude change at t_1 (b = .16, SE = .13, p = .22) and attitude change at t_2 (b = .14, SE = .09, p = .10) were non-significant. This may be due to the low statistical power.